



## CBA 400M-110 10 KHZ TO 400 MHZ 110 WATT CLASS A BROADBAND AMPLIFIER



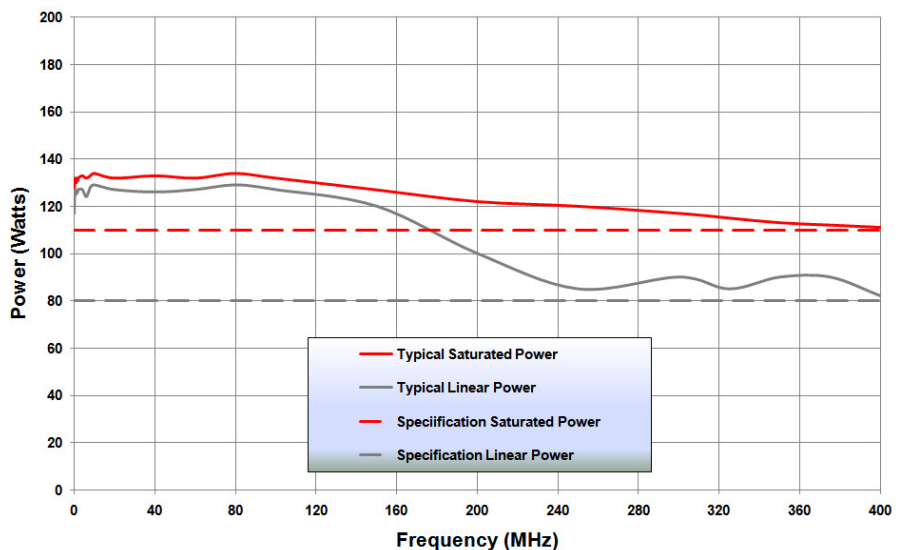
- Class A linear and low distortion design
- High reliability gallium arsenide technology
- Mismatch tolerant and unconditionally stable
- Wide instantaneous bandwidth
- Remote control option
- Three year parts and labour warranty

Designed specifically for automotive, military and aerospace BCI and other susceptibility EMC testing, this mismatch tolerant Class A amplifier delivers power continuously into the varying match typically associated with this type of testing.

The GaAs Class A push pull design ensures a high reliability, low distortion linear performance across the frequency range. This design also ensures that the amplifier will continue to operate at full power even when presented with an open or short circuit at its output. The use of gallium arsenide technology represents a breakthrough in amplifier design for this frequency range and output power. Previous designs based on silicon technology suffer from relatively poor compression characteristics, low efficiency and sometimes poor reliability.

The unit is powered from a switched mode power supply for high efficiency, high power factor and wide voltage range operation. The unit is air-cooled with integral fans, and is protected against faulty cooling by excess temperature sensing. A safety interlock connector is provided, which the user can short circuit to ground, to put the amplifier into standby mode. Front panel indicators are provided to indicate over-temperature and rf interlock operation.

**CBA 400M-110 Performance Data**





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Key RF Parameters	
Frequency range (instantaneous)	10 kHz to 400 MHz
Rated output power	110 W minimum
Output power at 1 dB gain compression	80 W minimum (110 W typical below 100 MHz)
Harmonics at 80 W output power	Better than -20 dBc
Gain (nominal)	51 dB
Gain variation with frequency	±2 dB
Maximum input power (no damage)	+10 dBm

Impedance / VSWR	
Output VSWR tolerance <sup>1</sup>	Infinity:1
Stability	Unconditional
Output impedance	50 Ω
Input VSWR	2:1

Additional RF Data	
Third order intercept point <sup>2</sup>	61 dBm
RF connector style	Type N female

Electrical and Interfaces	
USB interface	Optional
Dual safety interlock	Two BNC female connectors S / C to mute and O / C to mute
Supply voltage	100 to 240 Vac (+ / - 10%)
Supply frequency range	45 to 63 Hz
Supply power	<1 kVA (typical 700 VA)

Physical / Environmental	
Case dimensions	19 inch, 4U case, 440 mm deep
Weight	18 kg
Operating temperature range	0°C–40°C

Notes:

1. Output VSWR tolerance is specified for excitation within the permitted levels and frequency range.
2. The third order intercept point is a nominal value, as its calculation depends upon the power level at which distortion measurements are made.

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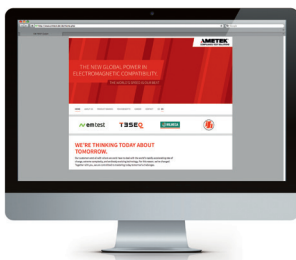
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